

WHAT IS CLAIMED IS:

1. An optical information medium comprising a disk-shaped supporting substrate having a center hole, an
5 annular information recording area thereon, and an annular resin-based light-transmitting layer on the information recording area by which recording/reading laser beam is transmitted,

10 said light-transmitting layer terminating at a radially inner periphery which forms an annular raised rim.

2. The medium of claim 1 wherein said annular raised rim is 5 to 300 μm higher than the nearby surface of said light-transmitting layer.

15 3. The medium of claim 1 wherein said light-transmitting layer has a thickness of 30 to 300 μm .

4. A method for preparing the optical information medium
20 of claim 1, comprising the steps of:

mounting a substrate in the form of the supporting substrate having the information recording area borne thereon on a rotating table, closing the center hole with a plug means having a disk member, feeding a coating fluid
25 containing a resin onto the disk member, and thereafter rotating the substrate together with the plug means for thereby spreading the coating fluid over the substrate to form an annular resin layer,

30 removing the plug means from the substrate, the resin layer being built up at the radially inner periphery thereof to form the annular raised rim, and

then curing the resin layer to form the light-transmitting layer.

35 5. The method of claim 4 wherein in the step of removing the plug means from the substrate, the resin layer has a

viscosity of 500 to 100,000 centipoise.

6. The method of claim 4 wherein the step of curing the resin layer is started within 0.5 to 10 seconds from the step of removing the plug means from the substrate.

7. The method of claim 4 wherein the substrate is kept stationary for the duration from the step of removing the plug means from the substrate to the completion of the step of curing the resin layer.

8. The method of claim 4 wherein the substrate is rotated at a rotational speed of up to 120 rpm for at least a portion of the duration from the step of removing the plug means from the substrate to the completion of the step of curing the resin layer.

9. A method for preparing the optical information medium of claim 1, comprising:

the step of mounting a substrate in the form of the supporting substrate having the information recording area borne thereon on a rotating table, closing the center hole with a plug means having a disk member, feeding a coating fluid containing an actinic radiation-curable resin onto the disk member, and thereafter rotating the substrate together with the plug means for thereby spreading the coating fluid over the substrate to form an annular resin layer,

the first curing step of irradiating actinic radiation to the resin layer for curing except a region thereof surrounding the radially inner periphery thereof, while the substrate is being rotated together with the plug means, the rotation of the plug means causing a portion of the resin on the disk member of the plug means to move toward the inner periphery of the resin layer whereby the resin layer is built up at the inner periphery thereof to

form the annular raised rim,

the step of removing the plug means from the substrate, and

- the second curing step of irradiating active
5 radiation to at least the region of the resin layer surrounding the inner periphery thereof for curing to form the light-transmitting layer.

10. The method of claim 9 wherein said plug means further
10 includes a support shaft having one end integrally joined to the disk member at its center and another end, and a circular mask member integrally joined to the support shaft near the other end and concentrically with the disk member and having a larger radius than the disk member, said mask
15 member serving to shield the actinic radiation irradiated in the first curing step.